

APPENDIX 13
Maintenance Plan (post sinking)

Kittiwake – Maintenance Plan

Schedule 3 of the Lease Agreement



1. OBJECTIVES:

The Maintenance program has been undertaken by the Cayman Islands Tourism Association (CITA) with the approval of and at the request of the Cayman Islands Government as one component in the overall Kittiwake Project. The ongoing maintenance of the Kittiwake is a requirement of the Lease Agreement with the Cayman Islands Government. The Maintenance program has been created to provide long-term monitoring, reporting and maintenance on the artificial reef/wreck. The intent of the program is to insure that the artificial reef/wreck is well maintained and monitored including several areas of concern and interest, namely:

- On-going Diver, Snorkler and Submarine Safety
- Debris Removal from time to time
- On-going protection of the surrounding natural reefs
- Boat safety for mooring and navigation

The CITA will lease the Kittiwake attraction after it is sunk from the Cayman Islands Government (CIG). The terms of the lease commit CITA to this Maintenance program during the term of the lease, in response to requirements from the Cayman Islands Department of the Environment (CIDOE). The CITA will provide the day to day maintenance on the Kittiwake.

In the past, no maintenance plans have been in place on any of the intentional or non-intentional wrecks that have been sunk, to insure that the wreck will continue to be maintained and cleaned. Natural forces of storms, surge, sand movement, hurricanes and normal deterioration will cause eventual damage to the Kittiwake with parts becoming loose or deteriorating causing debris or flotsam, over the anticipated 50+ year life span of the Kittiwake. This program puts in place measures to maintain the Kittiwake to mitigate causing or creating any damage to the natural reefs surrounding the Kittiwake and to maintain a safe wreck dive for boats, crew/captain/dive staff and visitors. Additionally, this program addresses the management aspects of dealing with the aforementioned should the Kittiwake deteriorate and need to be removed from natural artificial reefs.

It is safe to presume that once the maintenance program begins that new issues will be identified that will make the job easier and more efficient, resulting in a mutual agreement to revise the terms of the Maintenance Plan. The Maintenance Plan will form a section of a legally binding Coastal Works License and contract with CIG. It is proposed that the Maintenance Plan be reviewed at any time by the request of one of the parties to it or minimally every 2 years to review the plan and any updates that might be required to it based on experience or new needs as they are identified.

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2. CONTACTS:

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Cayman Islands Government:

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Cayman Islands Port Authority:

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or other such contact/personal information as may be updated from time to time in writing to all parties.

Ex-USS Kittiwake 251' Sub Rescue ASR-13:
Chanticleer Class Submarine Rescue Vessel
Displacement: 2,045 tons (full load)
Length: 251'4"
Beam: 42' Draft: 16'
Speed: 14.5 knots (max); 10 knots (econ)
Armament: 2 3"/50 DP, 8 20mm, 4 DC tracks
Complement:
Diesel-electric engines, single screw, 3,000 h.p.
Built at Moore, Savannah and commissioned 1944



3. BACKGROUND on the KITTIWAKE:

The USS Kittiwake has been cleaned and remediated to the Cayman Islands Department of the Environment standards, which are based primarily on the US MARAD/EPA Best Management Practices for Preparing Vessels Intended to Create Artificial Reefs. All Hazardous Materials and substances (HAZMAT) have been removed from the Kittiwake prior to her sinking, including asbestos, pcb's, toxic substances, oils, lubes, grease, black water, fuels, loose paint and the like. Hull cleaning was completed immediately prior to her departure from US waters to eliminate any invasive species being brought to Cayman waters.

Additionally, the majority of all loose flotsam, lagging, overhead wiring, carpet, floor tiles, exfoliating paint, thin sheet metal, crew cabin walls, wood and other materials that would create either diver safety concerns or become loose debris once sunk, thereby creating environmental hazards to corals reefs and marine life and/or divers has been removed from the ship. However, some tiles, wood and the like still remain on-board. These items, and any breakage, tearing away, etc. of the Kittiwake will need to be removed from the sinking site from time to time.

Diver safety cutouts are on the ship both vertically and horizontally, approximately every 50 feet. These entry/exit points are open areas that are labeled, allowing divers' easy egress from the ship at any point, and a navigational tool for divers to find their position on the ship. These exit/entrance areas will need to be maintained for cleaning of growth, maintaining smooth edges with no jagged protrusions for diver entanglement and insuring that all entry/exit points remain safe and labeled for divers to pass through.

For the purposes of creating an interesting dive for divers and snorklers, some main and ancillary equipment/machinery has been left on board, but cleaned of any potential HAZMAT and cleaned to be free from oils, lubes, greases and fuels prior to sinking. This machinery/equipment must

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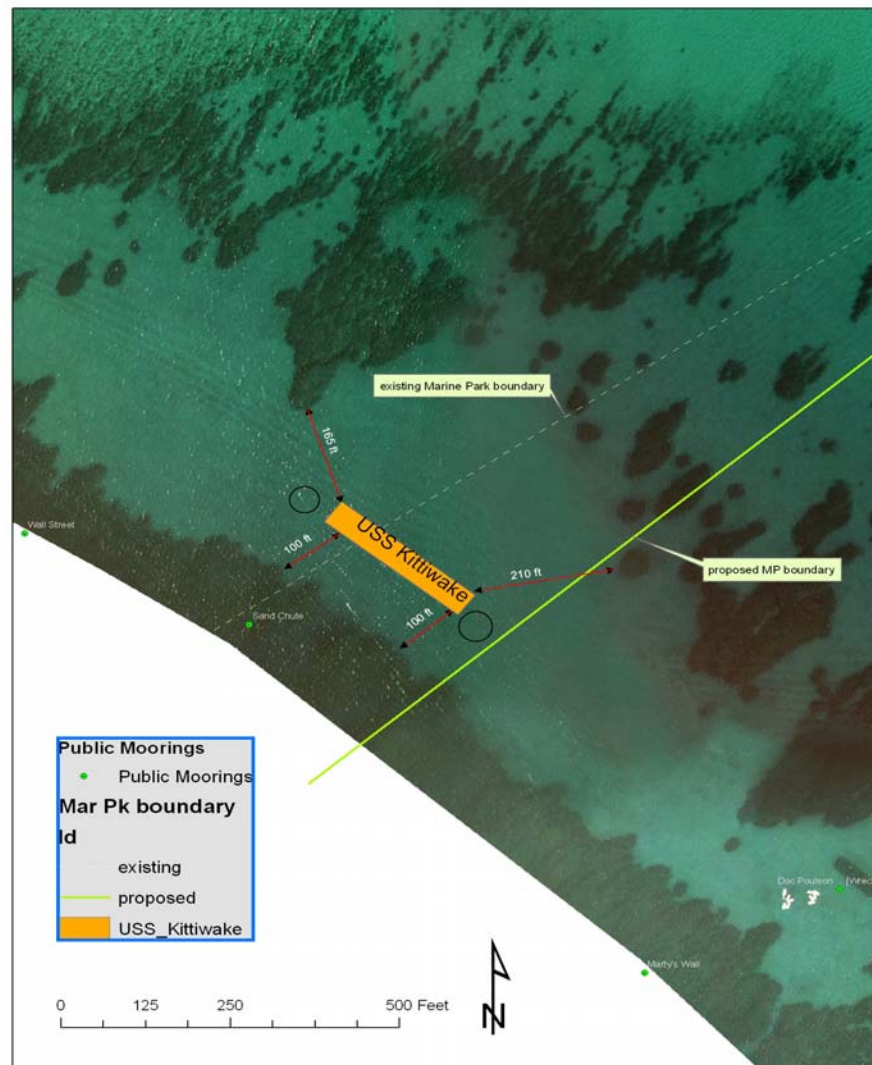
also be monitored to insure that it is not moving, breaking loose or deteriorating. In the event that is it, these items will be removed from the Kittiwake.

4. LOCATION of the KITTIWAKE:

The site location of the Kittiwake is on the West side (generally the lee side) of Grand Cayman, slightly south of the dive site named “Sand Chute”.

The sinking site is comprised of a large sand flat with no coral heads and a perimeter of a minimum of 100 feet plus in all directions around the Kittiwake to the nearest natural coral reef. The 100 foot minimum distance is on the wall/drop off side of the positioning of the Kittiwake, and inwards towards shore the minimum distance is in the 155 foot range.

Proposed Site of Kittiwake Wreck



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The above aerial shows the position of the Kittiwake. The anchors, along with the ship, will be inspected on a monthly basis to insure their stability and that they remain securely attached to the Kittiwake. Repair or replacement will be completed for worn chain, shackles and the like as required.

The site is located at the following coordinates:

Latitude: 19 21.714'N 081 24.073W Bow

Longitude: 19 21.688'N 081 24.044W Stern

Sea Reference: The site is located just off of the Sand Chute Dive Mooring

Bottom Composition: The area is very flat with a sand bottom

Depths: Stern: 56 feet Bow: 64 feet

Direction from Bow to Stern: WNW

The area that the Kittiwake is located in is a Marine Park Zone, thereby restricting fishing activities on the Kittiwake in addition to all other conditions of the Marine Park Conservation Laws in effect.

7. REPORTING and REPAIR TIME REQUIRMENTS:

Monthly and any interim written inspection reports will be completed and complied for distribution by CITA contractors and submitted to the CITA, CIDOE, CIG and MARAD (2 year reporting requirement from the date of transfer of the Kittiwake to MARAD) and the CI Port Authority (relating to any navigational marker or ship hazard issues) within 2 days of completion. These reports will be maintained by the CITA office for a period of 5 years.

CIG may inspect the site at any time and a written report to CITA will be provided should any issues be found.

The reports will be sent to the contact person as noted in this agreement or as amended from time to time by email with return confirmation requested. Report wills follow a standard format as outlined following, with additional verbiage added as required to make the report clear. In the event of a major issue being found, in addition to emails, a phone call will be placed to bring heightened awareness to the issue at hand. At all times, should the designated contact person be away or unavailable, each liaison will appoint a backup contact to act in their stead.

In addition to the monthly inspections, the CITA will accept reports on an add hoc basis, from any operators visiting the Kittiwake on a daily basis or also enforcement, police, maritime authorities, CIDOE or CIG, as is common practice in the dive/snorkel industry today. If an operator notices a missing mooring, fraying of a line, debris or another other environmental or

safety concern, then this report will be dealt with for reporting and affecting repairs under the same conditions and in the same time frames as if it was reported by the monthly maintenance team.

7.1 Monthly minor maintenance:

In the event that normal/minor maintenance is required on the Kittiwake, the dive team performing the inspections will perform the maintenance during the inspections, such as removal of manageable debris, securing lines and the like.

In the event that additional equipment or manpower is required for maintenance, the work effort needed will be reported and a team capable of accomplishing the task will be deployed as soon as possible to affect the repair. This will normally be accomplished within 2 days of the inspection, allowing time to gather the required resources and for deployment.

In all events, the repair needed will be completed within 2 weeks of the report of the damaged area. (e.g. navigation marker damaged, larger debris inside/outside of the vessel needs removing, mooring line maintenance, exit/entry demarcation/welding/cutting needing to be redone, and the like) with time being of the essence in all instances.

7.2 Environmental/Marine Threat/Safety problems:

If the problem is one that creates environmental, marine threat, diver, boat or navigational safety issues, (e.g. anchor detached, restricted compartment needs re-sealing, corroded access/exit hole has sharp edges, marine deterioration etc.) then a meeting with CIDO and the CITA office will occur immediately to decide on a course of action, including allowing time for repairs, the severity of the problem, partial or complete closing of the Kittiwake or other such direction that is appropriate to the problem. In all cases, time will be of the essence to complete all major repairs or problems on the Kittiwake.

7.3 Catastrophic Problems:

If the problem is of a catastrophic problem (e.g. Kittiwake moves dangerously close to the reef or shore or onto the reef or shore) or of a problematic environmental nature, then a task force comprised of CITA and CIDE representatives will be appointed immediately to address the problem. Funds for contingency catastrophic problems will be maintained by the CITA for immediate use. Any work done in this instance will be under the guidance, supervision and approval of the CIDO of the work plan. All contractors used for this type of work will be certified, insured marine salvage company representatives (or other such credentials as are applicable to the problem at hand) that are licensed, skilled and have the appropriate equipment (Barge, crane, booms, lifting equipment, cutting/welding equipment, etc.) to accomplish the task required. Where possible, contracts will be awarded to Cayman companies.

7.4 Inspections after storms:

In addition to regular inspections, special trips will be made to the Kittiwake immediately following storms, as soon as possible following the storm but requiring safe weather to visit the Kittiwake with a boat and dive team to insure the safety of personal, as this is the most probable time to find a problem. The Kittiwake will be checked for integrity, movement, breakage, anchor security, mooring lines and navigational markers being intact.

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A ‘storm’ is defined as a strong Nor’ Wester with wave action greater than 9 feet and all hurricanes passing within 200 miles of Grand Cayman of a Category 3 strength or greater. Should an alternate storm/weather issue/event be of specific concern given its nature, direction or the like, the CIDOE or CIG can request that the CITA inspect the Kittiwake and this will be treated as if it is a storm per the definition provided herein.

7.5 Salvage Operations:

For any major salvage operations that are beyond the capabilities of the monthly maintenance team, the following contractor will also be notified to assist in the remediation plan. As West Indian Marine Group sunk the Kittiwake and are capable of large scale salvage operations, their expertise will assist the team in formulating the most expedient and effective remediation plan.

John MacKenzie, Managing Director
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or other such contact/personal information as may be updated from time to time in writing to all parties.

8. SITE CLOSURE:

In the event that the Kittiwake site is deemed an environmental hazard or unsafe for humans, boats or creates navigational problems, a provision will be enacted to immediately shut down the site if such hazards exist. Dive, snorkel and submarine operators in addition to all contacts to this agreement and the general public will be notified by the CITA office of the closure of the site. Radio and newspaper notices will be used to communicate to the general public in addition to email communications to all commercial operators licensed to visit the site.

CITA will take the initiative to close the site or close access to portions of the site if conditions are unsafe. In addition to this, CIG will also have the right to close the site or portions of the site for safety concerns. In the later instance, CIG will notify the CITA of the intention to close the site along with a written report stating the reasons why the site is being closed. If CIG closes the site then the site would only re-open with CIG’s consent.

Upon closure of the site, the CIDOE Marine Enforcement will assist the CITA in notifying vessels that the site is closed. Violators will be subject to the CI Laws.

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Once repairs have been completed and the problem rectified, the site will be reopened with the same notification to all parties.

9. STAFFING:

The CITA will contract out on a paid for basis, monthly or interim inspections and maintenance on the Kittiwake. All personal contracted will be professional Divemasters/Instructors (or other such skills and expertise as may be required from time to time) with suitable training, guidance and proficiency in being able to carry out monthly inspections of the Kittiwake.

All personal contracted for monthly inspections and maintenance will be trained dive professionals that are in current status and insured, hold a certification in wreck diving, be proficient in lift bag deployment and underwater scooter use and have completed field training with a trainer that has done the job before.

The CITA will accept applications for this work from all CITA members and non-members as required and a review of their credentials will be completed prior to the applicant being retained for services. New contractors will be added on a month to month basis as applications will continue over many years with various personal coming and going from Cayman. At all times, a letter from the applicants employer will be required authorizing the employee to do the work, and payment will be made to a Company or legally self employed individual.

CITA will maintain an on-going in-house training program for any rotational contractors used for monthly or interim inspections.

All contractors will be hired from legal Cayman Islands watersports companies with valid Trade and Business Licenses and to the extent possible, be members of the CITA. Should particular expertise be required from time to time, CITA reserves the right to contract with a Caymanian or non-Cayman based organization to accomplish the goals of this program. CITA will bear all costs for the monthly inspections and maintenance of the Kittiwake. A full time person will be hired by CITA for the day to day responsibilities of the Maintenance Plan.

The CITA Executive Director will be responsible for:

- Oversight of the program
- Following up on data collection and reporting to all appropriate individuals
- Oversight of the reporting on the financial contributions made for Kittiwake visitation
- Scheduling monthly work required
- Scheduling specific programs/cleanups from time to time
- Reporting to the CITA Board of Directors
- Liaison with Port Authority, Department of the Environment, Ministry and Department of Tourism

For normal monthly inspections, on or about the 1st day of each month a team of approximately 6 divers will visit the Kittiwake and complete inspections. This task requires the minimum of the following, but may be amended from time to time as required.

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A dive boat with Captain as a Surface Support Supervisor

- 6 divers
- task list for each diver with designated inspection area
- slates/pencils
- lights
- lift bags
- underwater scooters
- camera or video for underwater photography
- underwater checklists
- waterproof tape measure for each inspector.
- Large mesh bags for small debris removal

Photography or video will also be taken during this monthly inspection to monitor the growth on the reef of marine life.

A detailed list of all inspections to be done monthly is provided following. The inspectors will be several teams consisting of 2 dives in each team. Standardized assignments to specific tasks for each team will be done in advance of the inspections and the team reports will be consolidated into a single report at the CITA office for distribution.

It is anticipated that the teams will inspect as follows: (or as amended based on future needs)

Team 1 – External to the Kittiwake, Wheelhouse/Bridge (Bridge Deck), top external deck (Deck A), moorings, navigational markers and anchors

Team 2 – Upper most decks consisting of decks B and C

Team 3 – Lower most decks consisting of deck D and including sealed fuel tanks and the like

Kittiwake Maintenance - MONTHLY INSPECTION LIST						
Inspection Date:			Time:			
Inspections by:						
Supervisor Signature:						
URGENT PROBLEMS:		YES			NO	
	Task Description	Ship Location (Deck/Frame)	Good/Okay	Fair /Minor	Problems/Additional Attention	Action Taken
1	Diver entry/exit marking clean and visible					

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2	Diver entry/exit holes - no sharp edges, tears, jagged edges					
3	Navigational Markers all intact and solid					
4	Diver entry/exit holes - no obstructions to safe exit					
5	Sealed compartments all intact					
6	Inspection inside the wreck for any loose debris, flotsam, tiles, parts of the ship or other that is loose					
7	Inspection of 360 degrees outside the wreck for any loose debris, flotsam, tiles, parts of the ship or other that is loose					
8	Check all 5 anchor sets for wear and tear, secure					
9	Dive Boat moorings - all intact and secure, no fraying, deterioration					

9. INSPECTION CHECKLIST:

The above noted checklist will be expanded to include specific decks, locations, anchor numbering, all exit/entry points and the like. A complete set of ships plans will be included once all cutouts have been completed and assigned designated identifications. Current general arrangements for the Kittiwake are on file to the CITA office.

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Following the checklist, a written report will be provided on any problematic areas in sufficient details as to outline the problem and where it exists.

In addition, all members will report immediately to CITA and CIDOE upon visiting the Kittiwake, should any issues be noted while diving or snorkeling on the Kittiwake. At all times the maintenance teams will coordinate and report to CITA to insure that the process and tasks are completed according to environmental and diver safety standards. Prior approval from CIDOE on the process and methodology for the removal of anything from the Kittiwake must be obtained.

The specific tasks involved in the Maintenance Plan are described following:

The following tasks are to be inspected and completed by the monthly dive inspection team. In the event that any task cannot be completed, this must be noted for immediate follow up action to the CITA for further distribution and resolution.

9.1 On-going Diver and Snorkler Safety

- Diver cutout markings being cleaned and clearly visible for navigation and safe/entry/exit points
- Remarking or cleaning any exit points whereby the deck level and ship orientation are not visible to divers
- Sharp edges being removed to prevent any tears, rips, cuts or accidents to divers
- Navigational markers on the Kittiwake monitored and any damage or repairs needed reported to the CI Port Authority in addition to the CITA. As this Kittiwake is in 65 feet of water, although clear of all navigational channels, the navigation Marker must be maintained at all times
- Any deterioration that might cause overhead snags or any deterioration that might block a passage, exit or entry point must be removed or repaired for diver/snorklers safety.
- Any sealed points in the Kittiwake that become opened up must be reported. These areas might not be safe for diver access, and as such will have to be inspected and then opened up or resealed as appropriate.

9.2 Debris Removal from time to time/ On-going protection of the surrounding natural reefs

- Inspection both inside and outside the Kittiwake for any loose debris, flotsam, tiles, parts of the ship or other items that could move and cause damage to the natural artificial reefs in the surrounding areas. Any of this debris needs to be removed from the water.
- Checking and repair of the additional 5 anchors set on the bottom to assist in securing the Kittiwake must be done, both the anchor security in the sand and the shackles and chains attaching the anchors to the ship.
- Inspection of the Kittiwake, parts of the Kittiwake or anchors for any movement from its original location. Any movement of the Kittiwake or anchors must be reported

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immediately. Measurement from the ship to the closest natural reef must be recorded and photo or video documented.

9.3 Boat safety for mooring and navigation

Monitoring and reporting to CIDOE on the state of moorings for boat security. Any moorings fraying, loose, or lost need to be reported to CIDOE for repair/replacement, such work to be carried out by CITA or CIDOE as agreed upon between the parties.